

## **REMARKS**

Claims 1, 2, 6, 7, 11-13, 16-20 and 22-24 are pending in the application. Favorable reconsideration is respectfully requested in light of the following Remarks.

Applicant gratefully acknowledges the courtesies extended to Applicant's representative during the December 8, 2009 telephone Interview. The sum and substance of the Interview is contained in the following Remarks.

The Office action rejects Claims 1, 2, 6, 7, 11-13, 16-20 and 22-24 under 35 U.S.C. 103(a) over Josephson et al. (U.S. Patent No. 7,155,423, hereinafter "Josephson") in view of Carey et al. (U.S. Patent No. 7,206,760), hereinafter "Carey"). The rejection is respectfully traversed.

Claim 1 specifies, *inter alia*, the steps of:

(d) generating bins for all remaining non-selected dimensions of the portfolio performance space;

(e) determining a solution in each bin of the non-selected dimensions with a maximum value along the selected dimension; and

(f) comparing the solution with the maximum value in each bin to other solutions in each bin to determine whether the other solutions are dominant solutions or dominated solutions.

Support for this novel concept of the fast dominance filter of the claimed invention can be found, for example, in *Paragraphs [00171]-[00186]* and *Figures 10 and 11*.

Josephson teaches a "classical" dominance filter that removes dominated candidates such that surviving candidates are Pareto optimal. See *col. 4, lines 36-44*.

Applicant agrees with *Page 3* of the final Office action that Josephson does not teach steps (c)-(g) of independent Claim 1 and the corresponding system of independent Claim 19.

However, on *Page 4* of the final Office action, the Examiner asserts that Carey teaches steps (c)-(g) of the claimed invention. Specifically, the Examiner states:

“However, **Carey** teaches a strategy of defining an universe of securities for potential investment [column 1 lines 54-60] and uses statistical analysis to evaluate the price history of each [column 2 lines 4-18]. Stocks are sorted and stored according to magnitude of a stocks *one-year price appreciation* [column 2 line 55-63], magnitude of the company’s *return-on-assets* [column 3 lines 17-30], and *price-to-cashflow ratio* [column 3 lines 30-44]. He further discloses sorting all stocks in descending order of *one-year price appreciation* and writing to File A, descending order of *six-month price appreciation* and writing to File B, descending order of *return-on-assets ratio* and writing to File C, and **ascending order of price-to-cash flow ratio** and writing to File D [Figure 1]. Examiner respectfully interprets these *Files A,B,C, and D* as analogous to Applicant’s **bins of the portfolio performance space** whereas the parameters *one-year price appreciation*, *six-month price appreciation*, *return-on-assets ratio*, and *price-to-cash ratio* as analogous to Applicant’s **dimensions** with a maximum value. Examiner notes that *maximum values*-extreme values-are inherent when sorting stocks in ascending or descending orders of magnitude.”

Applicant respectfully disagrees with this assertion.

Carey teaches the concept of sort ordering stocks based on various parameters, and placing the sorted stocks in files (files A, B, C and D). The average rank of each stock in the four files is determined and written to a file E. A predetermined number of the top stocks are selected from the file E and written to file F. See Figure 1.

However, Carey is not directed to a dominance filtering technique, and therefore, does not teach the concept of bins (or binning), as understood by those skilled in the art of mathematical financial analysis. Therefore, Carey does not teach or suggest at least steps (d)-(f) of the claimed invention, which recite:

(d) generating bins for all remaining non-selected dimensions of the portfolio performance space;

(e) determining a solution in each bin of the non-selected dimensions with a maximum value along the selected dimension;

(f) comparing the solution with the maximum value in each bin to other solutions in each bin to determine whether the other solutions are dominant solutions or dominated solutions.

For at least this reason, Claims 1 and 19 are allowable over the applied art, taken singly or in combination. Claims 2, 6, 7, 11-13, 16-18, which depend from Claim 1, and Claims 20 and 22-24, which depend from Claim 19, are likewise allowable over the applied art, taken singly or in combination.

In addition, the sort ordering method of Carey sorts one dimension (*one-year price appreciation, six-month price appreciation, return-on-assets ratio, or price-to-cash ratio*) at a time (See steps 13, 17, 21 and 25). Therefore, it is impossible for Carey to generate bins for all remaining non-selected dimensions even if the various parameters (*one-year price appreciation, six-month price appreciation, return-on-assets ratio, and price-to-cash ratio*) of Carey can be loosely interpreted as the at least three dimensions of the portfolio performance space, and the files A, B, C and D of Carey can be loosely interpreted as the bins of the claimed invention. Thus, in no way whatsoever does Carey teach or suggest at least the steps of (d) and (e), which recite:

(d) generating bins for all remaining non-selected dimensions of the portfolio performance space;

(e) determining a solution in each bin of the non-selected dimensions with a maximum value along the selected dimension.

For at least this additional reason, Claims 1 and 19 are allowable over the applied art, taken singly or in combination. Claims 2, 6, 7, 11-13, 16-18, which depend from Claim 1, and Claims 20 and 22-24, which depend from Claim 19, are likewise allowable over the applied art, taken singly or in combination.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of the application is earnestly solicited.

Appl. No. 10/781,804  
Response to final Office action dated October 21, 2009  
Attorney Docket 141121-4

Should Examiner Baird believe anything further would be desirable in order to place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

It is believed that any additional fees due with respect to this paper have already been identified. However, if any additional fees are required in connection with the filing of this paper, permission is given to charge account number 07-0868 in the name of General Electric Company.

14 December 2009

Respectfully submitted,

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